

**ABSTRACT**

This method of forming a carbonaceous material projection structure includes: the step of applying a resist 11 onto a diamond substrate 10; the step of forming holes 12 in the applied resist 11, the holes 12 being provided according to a predetermined arrangement, a wall 12b of each of the holes 12 being inversely tapered from an aperture 12a toward a bottom; the step of depositing a mask material through the aperture 12a to form a mask deposition 14 in each of the holes 12; the step of lifting off a mask material 13 deposited on the resist 11 together with the resist 11; and etching the diamond substrate 10 using the mask deposition 14 as a mask to form a carbonaceous material projection.